

Title (en)
Improved method for removing moisture particles.

Title (de)
Verfahren zur Entfernung von Feuchtteilchen.

Title (fr)
Méthode pour éliminer des particules humides.

Publication
EP 0074441 A1 19830323 (EN)

Application
EP 81304161 A 19810910

Priority
EP 81304161 A 19810910

Abstract (en)
An improved method for removing particles entrained in air, particularly moisture particles which may contain salt or other contaminating matter. The improved method is particularly useful in connection with marine applications for removing moisture particles from air being introduced to a gas turbine on a marine vehicle. The improved method includes the steps of passing the air at a velocity greater than 20 ft. per second through an inertia separating device (16) for inertially removing at least a portion of the larger sized particles in the air to provide partially processed air, and then passing the partially processed air at a velocity which is greater than a predetermined velocity through an impact filtering pad (26) for removing particles entrained in partially a processed air. The impact filtering pad comprises at least one layer of a plurality of fibers (28), each of the fibers having a diameter greater than .001 inches and less than .006 inches, and the ratio of total surface area of the fibers in the pad to the volume of the pad being greater than 45 ft.-><1> and less than 1400 ft-><1>. The predetermined velocity at or above which the partially processed air is passed through the impact filtering pad is greater than 20 ft. per second and is chosen according to the diameter of the fibers in the pad so that there is no coalescence of moisture particles captured by the pad.

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B01D 45/08; **F02C 7/042**

IPC 8 full level
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CPC (source: EP)
B01D 45/08 (2013.01); **B01D 53/26** (2013.01); **F02C 7/05** (2013.01); **F02M 35/02** (2013.01)

Citation (search report)
• [A] DE 329827 C 19201207 - HEINRICH MEYER
• [A] US 4175933 A 19791127 - JAMES GRANVILLE C [GB]

Cited by
EP0947366A3; FR2664650A1; US5653786A; ES2087819A1; WO2014164128A1; US10041882B2; EP1066871B1; WO9526803A1; WO9302964A1; WO2015074669A1

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